John R. Harrald, Ph.D.
Director, Institute for Crisis, Disaster, and Risk Management
The George Washington University
House Committee on Government Reform Hearings, September 15, 2005:
"Back to the Drawing Board: A First Look at Lessons Learned from Katrina"

Thank you Mr. Chairman for the opportunity to testify. We can explain much of what we have witnessed during the last 2½ weeks, but we cannot accept that this is the best that we can do. The alternative is to believe that when catastrophe strikes, we are unable to minimize the immediate human suffering by getting people out of harms way when possible, and incapable of meeting their critical needs when it is not. In Louisiana and Mississippi, the heroic efforts of many men and women were not enough to compensate for the breakdown of our national response system.

In order to understand the lessons from the failed initial response to Hurricane Katrina and to use this knowledge to improve the preparedness of other metropolitan areas at risk, we must be able to separate systemic failures from issues of organizational and individual preparedness and competence. Did we chose the wrong strategies, structures, policies and procedures or is was this just a failure to professionally and competently execute? I believe we are guilty of both doing some wrong things and doing some things wrong. If we ignore the systemic issues and simply replace people or re-assign responsibilities, we may simply fail again in the not too distant future with a different cast of characters.

Prediction, planning, preparation, capacity, and capability are all essential if we are to avoid catastrophic consequences from a natural or technological disaster or a terrorist attack. We have done well with prediction which is a scientific and technological task. We have also done reasonably well with the bureaucratic task of producing emergency plans. We have, in my opinion, confused preparing the government with preparing the society at large. We have spent far more on training first responders than we have in mitigating vulnerability, improving our ability to warn the citizens, or to educating and preparing the public. We have not adequately involved the private sector in preparedness or recovery. Our drills and exercises have identified the problems we must solve and the capacity and capabilities we will need to respond to and recover from catastrophic events be we have failed to make the investments necessary to build this capacity and capability.

The potential catastrophic impacts of a Category 4 or 5 hurricane strike near New Orleans were predicted and studied as have been the potential impacts of a massive earthquake in Los Angeles or San Francisco or a terrorist attack in Washington or New York. These scenarios have been appropriately used as the basis for federal, state and local catastrophic incident planning. For example, the Catastrophic Incident Annex to the National Response Plan published by the Department of Homeland Security assumes that:

- "A catastrophic incident may cause significant disruption of the area's critical infrastructure, such as energy, transportation, telecommunications, and public health and medical systems." The total loss of infrastructure in New Orleans is one the main discriminators between this event and prior near catastrophic events in U.S. history such as Hurricane Andrew and the Northridge earthquake. Post 9-11 infrastructure protection investments have focused on increasing the security of infrastructure, not in increasing its resilience.
- "The response capabilities and resources of the local jurisdiction (to include mutual aid from surrounding jurisdictions and response support from the State) may be insufficient and quickly overwhelmed. Local emergency personnel who normally respond to incidents may be among those affected and unable to perform their duties." The New Orleans leaders, emergency managers and first responders were all victims. The police and firefighters that responded were themselves, homeless, and were not reinforced by state and federal resources for days.

- "A detailed and credible common operating picture may not be achievable for 24 to 48 hours (or longer). As a result, response activities must begin without the benefit of a detailed or complete situation and critical needs assessment." The failure to obtain situational awareness during Katrina is well documented, as is the failure to act creatively and quickly based on incomplete information. The total breakdown of emergency communications was a key part of this failure.
- "Federal support must be provided in a timely manner to save lives, prevent human suffering, and mitigate severe damage. This may require mobilizing and deploying assets before they are requested via normal NRP protocols." FEMA coordinated a massive mobilization effort. The need to deploy assets, other than search and rescue, outside of normal protocols apparently was not recognized.
- "Large numbers of people may be left temporarily or permanently homeless and may require prolonged temporary housing." The peak shelter population was over 250,000 people; today over 125,000 evacuees are in temporary shelter and many of them will require extended housing assistance. We are only now developing a long term housing and recovery strategy.
- "A catastrophic incident may produce environmental impacts...that severely challenges the ability and capacity of governments and communities to achieve a timely recovery." Much of Southern Louisiana including New Orleans and Lake Ponchatrain is an environmental disaster area and the federal involvement in the environmental clean up will last years.
- "A catastrophic incident has unique dimensions/characteristics requiring that response plans/strategies be flexible enough to effectively address emerging needs and requirements."

 The Department of Homeland Security has spend years developing a common, national approach to incident management through the creation of the National Response Plan (NRP), the National Incident Management System (NIMS) and the National Preparedness Goals. This emphasis on structure and process may have diminished our ability to react creatively and adaptively.

The scale and scope of Hurricane Katrina is unprecedented. However, we know that other major metropolitan areas are also at risk to similar catastrophic scenarios. Are we any more prepared to respond to a catastrophe in any of these cities than we were in New Orleans? Our Institute has partnered with the University of New Orleans to help improve the preparedness efforts in Washington and New Orleans. Ironically, UNO was working to mobilize churches and other community centers to help ensure that those without access to transportation would be evacuated. GWU, with assistance from UNO, conducted the after action review of the District of Columbia response to Hurricane Isabel in 2003. We found that, although the District plans were followed and systems generally worked well, that this tropical storm pushed the limits of the District's capabilities, that coordination with PEPCO was difficult, and that effective communication with large segments of the public was never achieved. The District of Columbia, the States of Virginia and Maryland, and the Council of Government are attempting to improve the readiness of the DC metropolitan area, but progress has been slow. As reported in yesterday's Washington Post, we still have no reliable way to inform the public of what to do in a large scale emergency situation.

California has had more success in preparing for earthquakes. The 1989 Loma Prieta earthquake and the 1994 Northridge earthquake ensured a level of public and political support for preparedness actions that did not exist in New Orleans and does not exist in Washington. We have worked with the American Red Cross and the Association of Bay Area Governments (ABAG) to improve the preparedness for a catastrophic earthquake in the San Francisco Bay area and similar activities have occurred in Los Angeles. These efforts were fully supported by and coordinated with the State Office of Emergency

Services, and city and county emergency managers. The ABAG work, which may be found on their web site, supports mitigation (retrofitting), public education, individual preparedness, and response planning. The Red Cross, for example, realizing that infrastructure damage would create virtual "islands" that may not be accessible from the outside or from each other, has planned to create self-support sheltering and feeding operations in each area. In spite of the relative success of these efforts, however, managers anticipate issues encountered in Louisiana, such as failure to communicate with and meet the needs of the neediest section of the public, failure to coordinate federal, state, local and NGO actions, and failure to establish and maintain reliable communications could occur.

I believe that the examination of the preparation for and response to Hurricane Katrina is critically important and should be conducted by an independent body. This independent and expert review must assist us to:

- Focus our efforts on reducing the vulnerability of those in harm's way in our cities at risk,
- Improve our ability to warn and communicate, and improve our ability to identify and meet immediate needs following a catastrophic event,
- Improve the agility, mobility, capacity, self sufficiency, and creativity of our national emergency management system,
- Provide a conceptual framework for an integrated national approach to mitigation, preparedness, response and recovery,
- Provide resources and information to elected and appointed and appointed officials to enable them to become better managers of extreme events.
- Recognize that social and economic recovery requires a strategy for housing our citizens and recovering the local and regional economy.

Thank you.